

IN THE SPECIFICATION

Please replace the abstract with the following amended abstract:

~~The invention includes an A~~ Ethernet transceiver is disclosed. The ~~Ethernet~~ transceiver includes a plurality of digital signal streams, wherein at least one digital signal stream is coupled to another of the digital signal streams. A transform block transforms a plurality of the digital signal streams from an original domain into a lower complexity processing domain. A processor ~~for~~ joint processes the transformed digital signal streams, each joint processed digital signal stream is being influenced by other digital signal streams. An inverse transform block inverse transforms the joint processed signal streams back to the original domain. ~~Another embodiment of the invention includes a~~ A method of joint processing a plurality of digital signal streams is also disclosed. A first act of the method includes transforming a plurality of the digital signal streams from an original domain into a lower complexity processing domain. A second act of the method includes joint processing of the transformed digital signal streams, each joint processed digital signal stream being influenced by characteristics of other digital signal streams. A third act includes inverse transforming the joint processed signal streams back to the original domain.